

Abstract

The vacuum desiccator low pressure vacuum pump and trap and is transportable upon a user's person. The device is especially useful to remove excess fluids from wounds and incisions as they heal. The device includes a desiccator cartridge containing a fluid trapping agent. The desiccator cartridge is connected to a vacuum pump member providing a low vacuum pressure to the interior chamber of the desiccator cartridge. A small battery powered, electric motor drives the pump member. An electrical control circuit, including the battery power source, controls the operation of the electric motor. A single passage, one-way, gas/liquid flow pathway connects the inlet port of the desiccator cartridge to an occlusive dressing covering the wound to be drained. The control circuit includes one or more ancillary circuits for controlling operation of the device, such as: a power circuit, a moisture sensor, a timer circuit, a vacuum pressure sensor, and a pressure differential sensor.

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